

**STORNO DTMF-CONTROLLED REPEATER/LINK BOARD**

| <b>Item</b> | <b>Quantity</b> | <b>Reference</b>                                                            | <b>Part</b>    |
|-------------|-----------------|-----------------------------------------------------------------------------|----------------|
| 1           | 8               | C1,C6,C7,C15,C18,C19,C24,<br>C25                                            | 100n,          |
| 2           | 3               | C2,C5,C8                                                                    | 1u 25V,        |
| 3           | 1               | C3                                                                          | 470u 25V,      |
| 4           | 2               | C4,C20                                                                      | 10u 25V,       |
| 5           | 3               | C9,C10,C11                                                                  | 100p,          |
| 6           | 2               | C12,C23                                                                     | 1u 16V,        |
| 7           | 2               | C13,C21                                                                     | 220n,          |
| 8           | 1               | C14                                                                         | 10n,           |
| 9           | 2               | C16,C17                                                                     | 10u 16V,       |
| 10          | 1               | C22                                                                         | 47n,           |
| 11          | 19              | D1,D2,D3,D4,D5,D6,D8,D9,<br>D10,D11,D12,D13,D14,D15,<br>D16,D17,D18,D19,D20 | 1N4148,        |
| 12          | 1               | D7                                                                          | 3V3 ZENER,     |
| 13          | 2               | JP1,JP2                                                                     | JP1W,          |
| 14          | 1               | JP3                                                                         | JP2W,          |
| 15          | 1               | LED1                                                                        | LED 3mm GREEN, |
| 16          | 1               | LED2                                                                        | LED 3mm RED,   |
| 17          | 1               | LED3                                                                        | LED 3mm AMBER, |
| 18          | 6               | LED4,LED5,LED6,LED7,LED8,<br>LED9                                           | RED 3MM,       |
| 19          | 2               | PR1,PR4                                                                     | 2M HORIZ,      |
| 20          | 1               | PR2                                                                         | 2k2 HORIZ,     |
| 21          | 2               | PR3,PR6                                                                     | 10k HORIZ,     |
| 22          | 1               | PR5                                                                         | 100k HORIZ,    |
| 23          | 1               | Q1                                                                          | 2N2905,        |
| 24          | 3               | Q2,Q3,Q4                                                                    | 2N3819,        |
| 25          | 4               | Q5,Q6,Q7,Q8                                                                 | BC327,         |
| 26          | 1               | Q9                                                                          | BC237,         |
| 27          | 8               | R1,R28,R29,R36,R39,R54,<br>R56,R60                                          | 47k,           |
| 28          | 13              | R2,R7,R30,R31,R32,R33,<br>R34,R35,R38,R40,R53,R55,<br>R59                   | 10k,           |
| 29          | 2               | R5,R9                                                                       | 100R,          |
| 30          | 2               | R3,R57                                                                      | 1M,            |
| 31          | 12              | R4,R14,R15,R16,R17,R22,<br>R23,R24,R27,R41,R42,R61                          | 100k,          |
| 32          | 7               | R6,R13,R50,R51,R52,R62,<br>R63                                              | 470k,          |
| 33          | 1               | R8                                                                          | 15k,           |
| 34          | 1               | R10                                                                         | 150R,          |
| 35          | 1               | R11                                                                         | 68R,           |
| 36          | 1               | R12                                                                         | 470R,          |
| 37          | 4               | R18,R19,R20,R37                                                             | 2k2,           |
| 38          | 3               | R21,R25,R26                                                                 | 220k,          |
| 39          | 5               | R44,R46,R47,R49,R58                                                         | 1k,            |
| 40          | 1               | R43                                                                         | 1M8,           |
| 41          | 1               | R45                                                                         | 4M7,           |
| 42          | 1               | R48                                                                         | 10M,           |

|    |    |                                                                                                                                                                                                                                                                       |                     |
|----|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 43 | 1  | S1                                                                                                                                                                                                                                                                    | SW SPDT CENTRE OFF, |
| 44 | 47 | TP1,TP2,TP3,TP4,TP5,TP6,<br>TP7,TP8,TP9,TP10,TP11,<br>TP12,TP13,TP14,TP15,TP16,<br>TP17,TP18,TP19,TP20,TP21,<br>TP22,TP24,TP25,TP26,TP27,<br>TP28,TP29,TP30,TP31,TP32,<br>TP33,TP34,TP35,TP36,TP37,<br>TP38,TP39,TP40,TP41,TP42,<br>TP43,TP44,TP45,TP46,TP47,<br>TP48 | PCB pins,           |
| 45 | 1  | U1                                                                                                                                                                                                                                                                    | LM324,              |
| 46 | 1  | U2                                                                                                                                                                                                                                                                    | LM358,              |
| 47 | 1  | U3                                                                                                                                                                                                                                                                    | 45436,              |
| 48 | 1  | U4                                                                                                                                                                                                                                                                    | 4514,               |
| 49 | 1  | U5                                                                                                                                                                                                                                                                    | 4017,               |
| 50 | 2  | U6,U7                                                                                                                                                                                                                                                                 | 4011,               |
| 51 | 3  | U8,U10,U11                                                                                                                                                                                                                                                            | 4093,               |
| 52 | 1  | U9                                                                                                                                                                                                                                                                    | 7912,               |
| 53 | 1  | U12                                                                                                                                                                                                                                                                   | LM555,              |
| 54 | 1  | Y1                                                                                                                                                                                                                                                                    | 3.579MHz,           |